Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A kit for determining a concentration of a vitamin D component comprising:

a releasing composition including from about 0.01 to about 5% of a cyclodextrin, from about 0.01 to about 5% of a sodium salicylate, and from about 0.1 to about 1.0M NaOH ~~an aqueous base component selected from the group consisting of NaOH and KOH~~, the cyclodextrin, the salicylate, and the ~~aqueous base component~~ NaOH being provided in an amount effective to reduce interference from a protein or a lipid with a vitamin D component present in a sample; and

a detecting composition including a label provided in an amount to produce a detectable signal when the vitamin D component is present in the sample.

2. (Previously presented) A kit of claim 1, wherein the cyclodextrin, the salicylate, and the aqueous base component are provided in an amount effective to reduce interference from proteins or fatty acids with a vitamin D component present in a sample of a mammal fluid.

3. (Previously presented) A kit of claim 2 wherein the mammal fluid is selected from the group consisting of milk, whole blood, serum, and plasma.

4. (Previously presented) A kit of claim 2 wherein the mammal fluid comprises a human serum.

5. (Original) A kit of claim 1 wherein the vitamin D component is selected from the group consisting of a metabolite of vitamin D2, D3, D4, D5, and D6.

6. (Original) A kit of claim 1 wherein the vitamin D component comprises a 25-OH-D.

7. (Original) A kit of claim 1 wherein the vitamin D component comprises a 1, 25-(OH)2-D.

8-10. (Cancelled)

11. (Previously presented) A kit of claim 1 wherein the releasing composition comprises about 0.35 to about 0.5 M of NaOH.

12. (Previously presented) A kit of claim 1 wherein the releasing composition is free of an organic solvent.

13-14. (Cancelled)

15. (Previously presented) A kit of claim 1 wherein the cyclodextrin is selected from the group consisting of alpha-cyclodextrin and a beta-methylated cyclodextrin.

16. (Cancelled)

17. (Previously presented) A kit of claim 1 wherein the releasing composition comprises about 2% of an alpha-cyclodextrin.

18. (Previously presented) A kit of claim 1 wherein the releasing composition comprises about 0.05% of a beta-methylated cyclodextrin.

19. (Currently amended) A kit of claim 1 wherein the releasing composition comprises about 0.5 to about 5% of ~~a metal~~ the sodium salicylate.

20. (Previously presented) A kit of claim 1 wherein the releasing composition further comprises about 0.01 to about 0.1% of a surfactant.

21. (Cancelled)

22. (Original) A kit of claim 1 wherein the releasing composition forms a homogeneous mixture with a mammal fluid.

23. (Cancelled)

24. (Cancelled)

25. (Original) A kit of claim 1 wherein the detecting composition comprises a host component and a partner component, wherein the host component binds to the partner component to form a partner/host complex, the concentration of the complex is proportional to the concentration of the vitamin D component.

26. (Original) A kit of claim 25 wherein the host component comprises an antibody, portions thereof, or mixtures thereof.

27. (Original) A kit of claim 25 wherein the host component is labeled with a chemiluminescent label, a fluorescent label or a radio-active label.

28. (Original) A kit of claim 25 wherein the host component is an antibody labeled with acridinium.

29. (Original) A kit of claim 25 wherein the partner component comprises a vitamin D component linked to a separator component, the separator component is a solid phase or an antibody.

30. (Original) A kit of claim 29 wherein the separator component comprises a magnetic particle.

31. (Original) A kit of claim 29 wherein the partner component comprises a vitamin D component linked to a magnetic particle.

32. (Original) A kit of claim 31 wherein the partner component competes with the vitamin D component to bind to the host component.

33. (Original) A kit of claim 32 wherein the host component is an antibody labeled with acridinium.

34. (Original) A kit of claim 32 wherein the partner component binds to the host component through at least one intermediate binding component.

35. (Original) A kit of claim 34 wherein the intermediate component is labeled.

36. (Original) A kit of claim 34 wherein the intermediate component is labeled and the host component is not labeled.

37. (Previously presented) A kit of claim 34 wherein at least one intermediate binding component comprises a vitamin D binding-protein.

38. (Original) A kit of claim 25 wherein the partner component competes with a vitamin D component to form a complex with the host component, the partner component comprises a vitamin D component linked to a magnetic particle, the partner component binds to the host component through a vitamin D binding-protein, the host component comprises an antibody labeled with acridinium.

39. (Original) A kit of claim 38 wherein the concentration of the complex is inversely proportional to the concentration of the vitamin D component.

40. (Previously presented) A kit of claim 1 wherein the concentration of the vitamin D component is determined with a higher precision than that of an assay kit relying on an organic solvent to release the vitamin D component from the binding-protein.

41. (Original) A kit of claim 1 wherein the releasing composition forms a homogeneous mixture with a body fluid containing the vitamin D component.

42-84. (Cancelled)

85. (Currently amended) A kit of claim 1, wherein the releasing composition further includes ~~about 0.1 to about 1.0 M of NaOH or KOH, 0 to about 5% of the cyclodextrin, 0 to about 5% of salicylate and~~ from about 0% to about 0.1% of a surfactant, and wherein the detecting composition includes an antibody labeled with acridinium.

86. (New) A kit for determining an amount of 25-hydroxy Vitamin D (25-OH-D) in a sample, comprising:

a composition including a cyclodextrin, a salicylate, and an aqueous base component selected from the group consisting of NaOH and KOH, the cyclodextrin, the salicylate, and the aqueous base component being provided in an amount effective to reduce interference from a protein or a lipid with 25-OH-D present in the sample;

and a plurality of reagents including 25-OH-D coupled to a solid phase, and a label provided in an amount to produce a detectable signal when 25-OH-D is present in the sample.

87. (New) The kit of claim 86, wherein the plurality of reagents further comprise at least one of a vitamin D-binding protein (DBP), and a labeled antibody that binds DBP.

88. (New) The kit of claim 86, wherein the antibody is labeled with a chemiluminescent label.

89. (New) The kit of claim 88, wherein the antibody is an acridinium labeled anti-DBP antibody.

90. (New) The kit of claim 86, wherein the composition comprises about 0.1 M to about 1.0 M NaOH or KOH, about 0% to about 5% cyclodextrin, and about 0% to about 1% salicylate.

91. (New) The kit of claim 86, wherein the solid phase comprises magnetic particles.

92. (New) The kit of claim 86, wherein the plurality of reagents are provided in a composition having a pH between about 6 to about 9.

93. (New) The kit of claim 86, wherein the composition further comprises a surfactant.